

A STUDY ON CHALLENGES OF MULTICULTURAL TEAM MEMBERS OF IT SECTOR

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ABSTRACT

The main purpose of this research paper is to identify the communication issues and conflicts among the multicultural team members and effect of these challenge factors on cultural diversity. The researcher developed a conceptual framework based on the review of literature and data collected from the IT employees through interviews. Convenient sampling method adapted for this descriptive study and 430 was the sample size. Data analysis had done using EFA, CFA, validity analysis and SEM. The result confirmed that communication issues and conflicts exist among the multicultural team members. The result revealed that cultural diversity had significant influences on communication issues and conflicts.

Key words: Challenges among multicultural team members, Cross-cultural communication, Cultural diversity, Conflicts, Multicultural teams.

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1. INTRODUCTION

1.1. Scope of the Study

Multicultural team members may have various backgrounds like different speaking language, state, country, social status, education etc. Members belonging to a particular culture's perception and their attitudes about human beings, the world and their ideas are very different from each other (Miroshnik, 2002). Multicultural environment offers both opportunities and challenges to the team members (Adler, 2000). Both forces of positive and negative dominations were evident. Experiencing challenges among the team members had became a common problem. Main office may be in a continent or country and service might require in some other continent or country. There by companies have to dependent local employees for better services and requirements. Aligned working between these two groups become important task of the company now. Hence, talented and capable people required to work on this sort of environment, where both challenges and opportunities were apparent.

1.2. Statement of the Problem

Multicultural team consists of different group of people with different backgrounds and culture. As the culture has impact on every individual, it influences on the group behaviour, job behaviour, decision-making process, and performance. All these processes need proper communication, when communication becomes complex it affects the group and resulted conflicts. Conflicts create less cooperation and thereby decrease group cohesion. Communication, conflicts, poor cooperation often leads to process losses, which result in higher turnover and absenteeism rates (O'Reilly, 1989). The main purpose of this research paper is to identify the challenges communication issues and conflicts faced by the multicultural team members and its relationship with cultural diversity.

2. REVIEW OF LITERATURE

Campbell (2000) defines culture as a complex web of information that a person learns and which guides each person's perceptions, experiences and actions. It is not acceptable to proceed with the study of teams as if its members are isolated from their cultural and national heritage (Earley and Gibson, 2002). A Multicultural team is a group of employees selected from two or more countries who are brought together to coordinate, develop, or manage some aspect of a firm's global operations (Steers & Nordon, 2006). An individual's behavior in an organization will chiefly guided by the outside society from which he or she comes. It is impractical that individuals can have an effect of one and only culture (Schneider and Barsoux, 1997). Predominant problems in diverse team are due to communication challenges Horck (2006), communication problems, and the effect of language or accent problem were frustration, distrust among the participants (Ubaka, 2010). Mistrust among the participants, would slow down performance (Ubaka, 2010) and trust was more important for ensuring cooperation (Mariana, 2012). Members of multicultural teams were less likely to trust one another (Turner, 1987) and heterogeneous group members trust less their team member than homogeneous team members do (Rockstuhland and Ng, 2008).

3. RESEARCH METHODOLOGY

Objective of the study: To identify the communication issues and conflicts among the multicultural team members and effect of these challenge factors on cultural diversity.

Hypothesis of the study: Every single line drawn between the variables in SEM represent hypotheses.

H1 H₀. There is no significant impact of cultural diversity on challenge factors.

H₁- There is a significant impact of cultural diversity on challenge factors.

Area of the study: IT parks at Chennai

Sources of data: Primary data were collected from the employees through direct, phone and e-mail interviews with pretested, structured questionnaire. The secondary data were collected from various sources like library books, journals, research papers, thesis, reports, conferences, magazines, newspapers and web sites.

Sampling technique: Convenience sampling technique adapted for this descriptive study. Sample size was 430.

4. DATA ANALYSIS AND STATISTICAL TECHNIQUES

4.1. Statistical Techniques

The researcher performed the data analysis using exploratory factor analysis, confirmatory factor analysis, validity and reliability analysis and SEM for the study with aid of IBM SPSS20 and SPSS (AMOS23).

4.2. Socio-Categorical Background of IT employees

The Socio-Categorical background of IT employees showed that out of total respondents 430, 53.7% were male and 46.3% were female employees. It showed that majority of the employees (60.2%) were belongs

to age group of 41-50 years followed by 21-30 years (27.9%) and 31-40 years (11.9%). Majority (53.3%) of the employees falling under 21-30 years of experiences followed by 34% of 2-10 years experience and 12.8% of 11-20 years of experience.

4.3. Diversity Factors that Affect Multicultural Team Members in IT Sector

Sub-scale items of cultural diversity impact were cultural diversity (CD1) influences multicultural team, cultural diversity does have impact on (CD2) group behaviour (LaFromboise et al., 1993), (CD3) job behaviour (Harris and Moran, 1987), (CD4) decision-making process and (CD5) influences performance (Deresky, 2002). Communication is the major challenge (COM1) of multicultural team members (Jarvenpaa and Leidner, 1999), communication challenges (COM2) leads to conflicts (Tian and Borges, 2011), communication influences (COM3) decision-making process (Cabrera and Soto, 2010), communication influences (COM4) the knowledge sharing (Lauring & Selmer, 2011), communication problems (COM5) reduces performances (Lauring & Selmer, 2011) were subscale items of communication dimension. A conflict factor consists of cultural difference creates conflicts (CON1) among team members (Pelled, 1996), (CON2) conflicts lead to poor performance (Pelled, 1996), (CON3) conflicts lead to poor decision-making process (Tse, 1988), (CON4) conflicts lead to poor coordination (Herbsleb and Mockus, 2003) and (CON5) conflicts lead to poor cooperation (Karjalainen & Soparnot, 2012).

4.4. Exploratory Factor Analysis (EFA)

Exploratory factor analysis extraction was done using principal axis factoring and rotation was done using Promax with Kaiser Normalization (Ford, MacCallum and Tait, 1986).

Table 1 Exploratory factor analysis

Pattern Matrix ^a			
	Factor		
	1	2	3
CD1	.923		
CD2	.712		
CD3	.944		
CD4	.632		
CD5	.911		
COM1		.916	
COM2		.649	
COM3		.955	
COM4		.562	
COM5		.847	
CON1			.911
CON2			.589
CON3			.555
CON4			.915
CON5			.631

The percentage of the total item variance for model was explained by 70.83%. The variance value was more than the recommended value of 60% indicated the further EFA can be done. A significant ($p < 0.05$) KMO value 0.755, Chi-square value 7629.237 with df 190 arrived using KMO test. A significant result (Sig. < 0.05) of KMO value more than 0.6 indicated that variables were related to one another and meaningful EFA could be performed. The Table 1 described the items loaded after the factor analysis. All the items are exactly loaded to the corresponding factor shows that all the items can be retained for further study. Ford et al., (1986) suggested that factor loadings more than 0.40 criterion levels appear to be meaningful. As all the factor loading values are more than 0.4 and loaded to their relevant scales all these 15 items were retained for the further studies.

4.5. Confirmatory Factor Analysis (CFA)

Confirmatory factor analysis explained the a priori relationships and distinctions among variables or scales. In addition, goodness of fit of items needs to be measured using confirmatory factor analysis (Gaskin, 2016). The recommended threshold values for goodness of fit are $\text{cmin/df} < 3$, $p\text{-value} > .05$, $\text{CFI} > .95$, $\text{GFI} > .95$, $\text{AGFI} > .80$, $\text{RMR} < .09$, $\text{RMSEA} < .05$ or $.08$ and $\text{PCLOSE} > .05$ (Hu and Bentler (1999). Table 2 described the confirmatory factor analysis result. CFA values for the structural equation model was $\text{cmin/df} = 1.288$, $p\text{-value} = 0.043$, $\text{CFI} = 0.996$, $\text{GFI} = 0.970$, $\text{AGFI} = 0.954$, $\text{RMR} = 0.015$, $\text{RMSEA} = 0.027$ and $\text{PCLOSE} = 0.999$. Insignificant p value ($p > 0.001$) with all other values satisfied the required threshold values showed that model had goodness of fit.

Table 2 Fit statistics of Measurement Model

Fit statistic	CMIN/DF	P	CFI	GFI	AGFI	RMR	RMSEA	PCLOSE
Recommended	<3	>.05	>.95	>.95	>.80	<.09	<.05	>.05
Model fit	1.288	0.043	0.996	0.970	0.954	0.015	0.027	0.999

4.6. Validity and Reliability

The Table 3 shows the result of validity and reliability test. Reliability of the variables was tested using Cronbach's alpha method. Nunnally (1978) suggested that value more than 0.7 shows good internal consistency. As the entire alpha values are more than 0.7, it confirmed the good internal consistency of the variables corresponding to their construct. Convergent validity is arrived when all AVE values are more than 0.5 (Hair et.al, 2010). The Table 3 showed that AVE for all the constructs was more than 0.5 and established the convergent validity. Discriminant validity was arrived using inter-construct correlations. If square root of AVE greater than inter-construct correlations then it establishes discriminant validity (Malhotra and Dash, 2011). Table 3 showed that square root of AVE is greater than all other values. Hence, reliability, convergent validity and discriminant validity supported the establishment of model.

Table 3 Validity and Reliability table

	CR	AVE	MSV	MaxR(H)	CD	CON	COM
CD	0.907	0.674	0.017	0.996	0.821		
CON	0.836	0.530	0.017	0.997	0.131	0.728	
COM	0.886	0.625	0.002	0.998	0.048	-0.010	0.790

4.7. Structural Equation Model

Measurement model was converted into structural model. Keeping cultural diversity as a dependent variable and challenges factors as independent variables structural equation model was developed using AMOS 23. All lines connecting all the latent variables are indicating hypothesis. Using SEM proposed hypothesis were tested. The full structural equation model was measured and the hypotheses to be tested related to the pattern of causal structure linking with latent variables were done.

4.7.1 Fit statistics of structural equation model

Structural model's validity was established as it was done for the measurement model. A new covariance matrix was computed for SEM. Measurement model is different from the SEM, since the measurement model constructs are correlated, where as for structural model the relationships were assumed zero. Table 6 shows the fit indices of the structural model. As all the values are satisfying the prerequisite of threshold values, it shows that model has goodness of fit. Hence, it confirms that the proposed research model fits the data well.

Table 4 Fit statistics of SEM

Fit statistic	CMIN/DF	P	CFI	GFI	AGFI	RMR	RMSEA	PCLOSE
Recommended	<3	>.05	>.95	>.95	>.80	<.09	<.05	>.05
SEM Fit	1.314	0.032	0.996	0.970	0.954	0.015	0.027	0.999

CFA values for the structural equation model was cmin/df=1.314, p-value=0.032, CFI=0.996, GFI=0.970, AGFI=0.954 RMR=0.015, RMSEA=0.027 and PCLOSE= 0.999. Insignificant p value ($p>0.001$) with all other values satisfied the required threshold values showed that model had goodness of fit.

4.8. Hypothesis Testing

The hypothesized research model revealed good fit with observed data. Standardised regression weights with significance at $p<0.001$ provided support to the hypotheses proposed. The Table 5 described the standardized regression weights and hypotheses results. The Table 5 described the path coefficient of cultural diversity impact with (CD1) cultural diversity influences multicultural team (0.964), (CD2) cultural diversity does have impact on group behaviour (0.573), (CD3) job behaviour (0.999), (CD4) decision-making process (0.511) and (CD5) influences performance (0.909) were with a high significance P-value ($P<0.001$). Highly significant positive direct effect of cultural diversity impact on its subscale items showed that multicultural team members had impact of cultural diversity on the team members. The Table 5 described the path coefficient of communication issues with (COM1) major challenges (0.951), (COM2) leads to conflicts (0.558), (COM3) influences decision-making (0.996), (COM4) influences knowledge sharing (0.489) and (COM5) reduces performances (0.822) are with a high significance P-value ($P<0.001$). Highly significant positive direct effect of communication issues on its subscale items showed that multicultural team members had experienced communication issues.

Table 5 Standardised Regression Weights, P-values, and null hypotheses

Hypothesis paths			Estimate	R2	S.E.	C.R.	P	H ₀
CD1	<---	CD	0.964	0.93				Rejected
CD2	<---	CD	0.573	0.328	0.039	13.992	***	Rejected
CD3	<---	CD	0.999	0.998	0.015	67.913	***	Rejected
CD4	<---	CD	0.511	0.261	0.045	12.131	***	Rejected
CD5	<---	CD	0.909	0.826	0.023	38.734	***	Rejected
COM1	<---	COM	0.951	0.905	0.045	27.017	***	Rejected
COM2	<---	COM	0.558	0.312	0.052	13.438	***	Rejected
COM3	<---	COM	0.996	0.993	0.044	28.487	***	Rejected
COM4	<---	COM	0.489	0.239	0.056	10.797	***	Rejected
COM5	<---	COM	0.822	0.676				Rejected
CON1	<---	CON	0.959	0.92	0.100	14.752	***	Rejected
CON2	<---	CON	0.524	0.274	0.088	9.666	***	Rejected
CON3	<---	CON	0.423	0.179	0.070	9.188	***	Rejected
CON4	<---	CON	0.956	0.914	0.103	14.752	***	Rejected
CON5	<---	CON	0.603	0.364				Rejected
CD	<---	COM	0.048	0.019	0.060	0.991	0.321	Not Rejected
CD	<---	CON	0.130		0.069	2.617	0.009	Not Rejected

The Table 5 showed the path coefficient of cultural difference conflicts with (CON1) interpersonal conflicts (0.959), (CON2) poor performance (0.524), (CON3) decision-making process (0.423), (CON4) poor coordination (0.956) and (CON5) poor cooperation (0.603) were with a high significance P-value ($P<0.001$). Highly significant positive direct effect of cultural difference conflicts on its subscale items showed that multicultural team members had experienced cultural difference conflict issues.

The Table 5 further showed the path coefficients between cultural diversity impact with communication issues and conflicts. Both the hypothesised relationship between cultural diversity with communication issues and conflicts were insignificant. The insignificant values between cultural diversity and challenges factors showed that there was a need of mediating variable between these latent variables. Therefore, a mediator nonverbal communication issues was implicated between communication issues and cultural diversity. Similarly, lack of cultural of cultural knowledge was implicated as mediators between conflicts and cultural diversity.

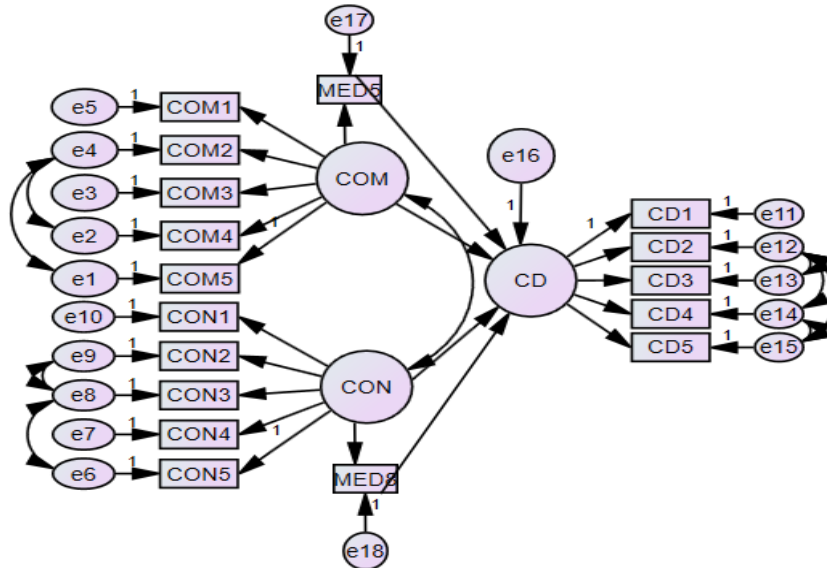


Figure 1 Structural Equation Model

Further, the modified structural equation model was subjected to CFA and confirmed the model fit. After the mediation analysis, the result showed that there was an indirect positive effect of communication issues on cultural diversity and indirect positive effect of conflicts on cultural diversity. Further bootstrapping was done to measure the indirect effect of challenge variables on cultural diversity and its significance. It showed that communication issues had significant indirect positive effect (0.345, $p < 0.001$,) on cultural diversity and conflicts had significant indirect positive effect (0.450, $p < 0.001$) on cultural diversity with R^2 value of 0.211. Thus, it supported the hypothesis that cultural diversity had significant impact on challenges factors. Fig.1 depicted the structural model of multicultural team challenges.

5. CONCLUSION

Cultural diversity factors exist everywhere at different levels and influences every individuals. The present study about the challenges of multicultural teams revealed that the cultural diversity influences multicultural teams. Cultural diversity impact on job behaviour, group behaviour, performance and decision-making processes were significantly apparent. This finding is in line with cultural and national variables effects on work behavior (Harris and Moran, 1987) and cultural diversity influences performance (Cox, 1991).

The hypothesis analysis disclosed that communication issues were major challenges of multicultural teams. It leads to conflicts, influences decision-making, influences knowledge sharing and reduces performances were significantly visible. This finding confirmed that predominant problems in diverse team were due to communication challenges (Theotokas and Progoulaki, 2007) and communication difficulties were the main drawback of mixed nationality crew (Kahveci and Sampson, 2001). It is significant that conflicts create interpersonal conflicts, conflict is negative on performances, it reduces coordination, cooperation and it influences decision-making process. This finding is in line with the previous study of Gupta et.al (2002) that conflicts in international management frequently arise out of cultural differences

and cultural diversity leads to misunderstandings, conflict, and mistrust (Steers & Nardon, 2006). The analysis revealed that multicultural team members experienced challenges due to cultural diversity. Communication challenges and conflicts had significant indirect effect on cultural diversity. Conflicts had higher influences (0.450) on cultural diversity than communication issues (0.354) for this study.

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